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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,307	10/29/2001	Josef Scharmuller	SCHARMULLER -I PCT	4882
7590	09/10/2004		EXAMINER	
Collard & Roe 1077 Northern Boulevard Roslyn, NY 11576			ROYAL, PAUL	
			ART UNIT	PAPER NUMBER
			3611	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/018,307	M SCHARMULLER, JOSEF	
	Examiner	Art Unit	
	Paul Royal	3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 7 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7 May 2004</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 7 May 2004 has been considered by the examiner.

***Response to Amendment***

2. The amendment filed on 7 May 2004 has been entered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Coilbert et al. (US 6,113,125).

Coilbert et al. teaches a coupling device for a towing vehicle and a trailer, the coupling device comprising coupling ball (102) arranged on a coupling carrier (101) and a moulded article (101), having a ball socket (104) and a connecting plate (CPLATE, see Examiner's annotated Figure 2), said moulded article made of a ferrous material and presenting a casting crust at least on the interior of the socket, see claim 8.

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Note it is well known that in the production of a cast steel moulded article (hitch coupler body) a crust forms during the casting process.

Further, the Examiner points out that Colibert et al. (US 6,113,125) teaches the ball socket 101 is made of "cast steel" and the invention of Colibert et al. includes a cam pin made of "polished steel". Colibert et al. appears to distinguish "cast steel" from "polished steel" in a manner which indicates the interior of the socket is not polished and retains the crust from the casting process. For the forgoing reasons the interior of the ball socket of Colibert et al. is understood include the crust formed during the casting process.

Note Coilbert et al. teaches the full invention is shown in Figure 7 and the moulded article is understood to be part of the coupling carrier/full invention.

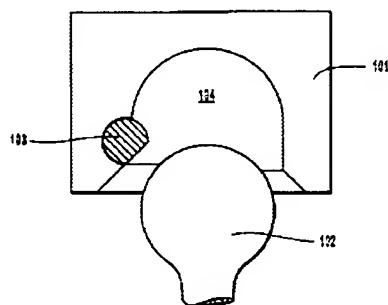


FIG. 1

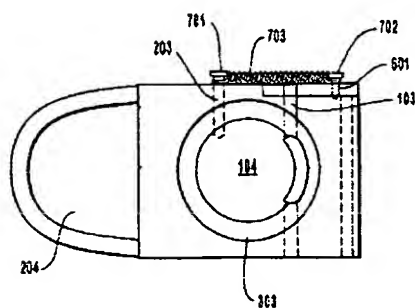


FIG. 7

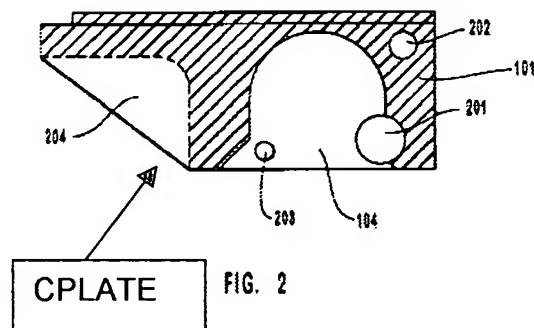


FIG. 2

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coilbert et al. (US 6,113,125).

Coilbert et al., as applied to claim 4 teaches all the claim limitations except wherein the ball socket has a lesser hardness than the coupling ball.

It is understood to be well known to use a ball socket Rockwell hardness which is less than the hardness of the coupling ball to selectively control wear.

***Response to Arguments***

5. Applicant's arguments filed 25 August 2003 have been fully considered but they are not persuasive.

Applicant's argument appears that it cannot be precluded that the crust was not removed from the coupler housing body of Colbert et al., as argued by the Examiner in the previous Office Action, because the invention of Colbert et al. appears to require close dimensional tolerance where a the cam pin 103 holds the coupling ball 102 in the ball socket 104 and not removing the crust would increase the possibility of dimensional inaccuracies.

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Applicant's argument, while salient, is not persuasive because Colibert et al. teaches the ball socket 101 is made of "cast steel" and the invention of Colibert et al. includes a cam pin made of "polished steel". Colibert et al. appears to distinguish "cast steel" from "polished steel" in a manner which indicates the interior of the socket is not polished and retains the crust from the casting process.

Further, in light of the Examiner's above arguments, since the step of polishing the interior of the socket is reasonably understood to be an additional and somewhat complex manufacturing step (due in part to the curved nature of the interior of the coupling housing) the Examiner cannot interpret the invention of Colibert et al. to have included removing the casting crust from the interior of the socket.

For the forgoing reasons the interior of the ball socket of Colibert et al. is understood include the crust formed during the casting process.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory


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action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Royal whose telephone number is 703-308-8570. The examiner can normally be reached on 8:30-4:30.

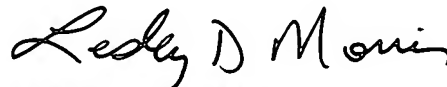
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 703-308-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



P. Royal  
9/7/04

Paul Royal  
Examiner  
Art Unit 3611



**LESLEY D. MORRIS**  
**SUPERVISORY PATENT EXAMINER**  
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